ENSOFT. INC.
ENGINEERING SOFTWARE

3003 Howard Lane
Austin, Texas 78728
Tel: (512) 244-6464
*www.ensoftinc.com*

PYWall and EnFEM Bundle

PYWall is a *p-y* based method, special-purpose program for analyses of flexible retaining walls.

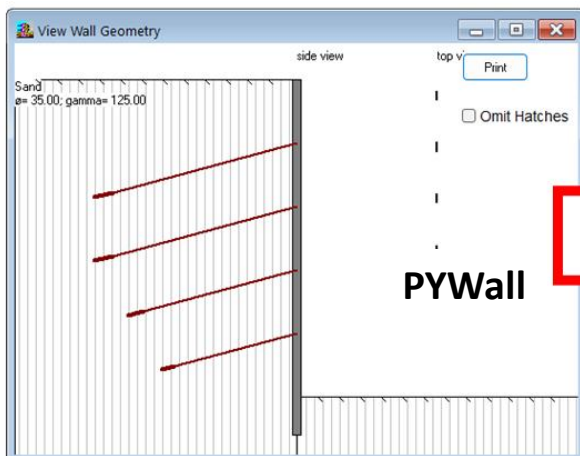**EnFEM** is a general-purpose 2D finite element software.

Build Model Once in PYWall and run analyses in both PYWall and EnFEM.

PYWall is a special-purpose software used for analyzing flexible retaining walls. PYWall is capable of analyzing the behavior of sheet-pile walls, secant walls, timber-lagging walls or soldier pile walls with or without tiebacks or bracing systems. The program estimates deflection, bending moment, shear force, and lateral soil response along the height of the retaining wall by solving the differential equation for a beam-column using a finite-difference approach.
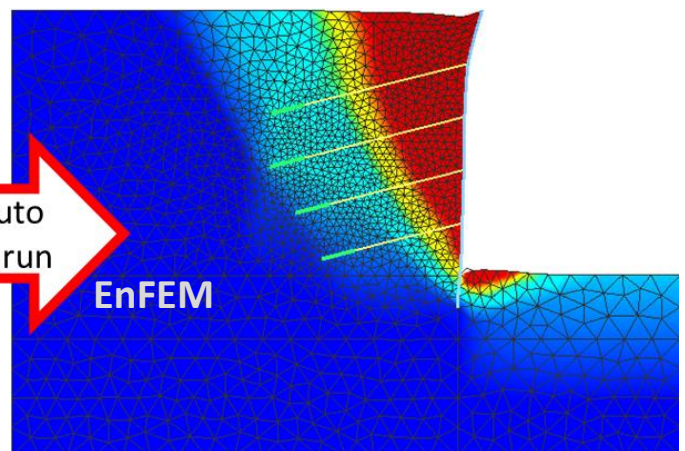
EnFEM is a general-purpose finite element analysis software used to simulate 2D mechanical behaviors of solid materials subjected to various loads. EnFEM is able to perform plane-strain, plane-stress, and axisymmetric analyses with an emphasis on solving problems in geotechnical engineering practice, which commonly simplifies the retaining system into a plane-strain application. EnFEM is equipped with a variety of linear and non-linear material models, boundary conditions, interface elements, and various element types (first or second-order quadrilateral or triangular solid elements, beam elements, and tension-only bar elements), to provide users a full array of analysis options necessary for geotechnical and structural applications, from simple to complex.
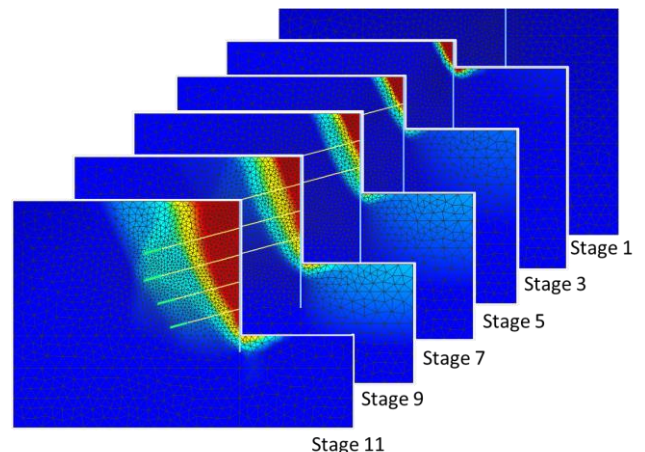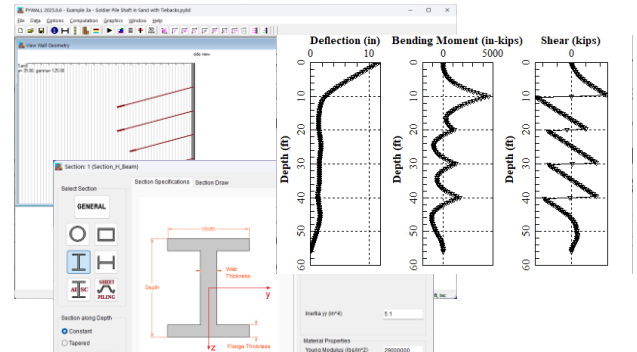
Build Model Once in PYWall and run analyses in both PYWall and EnFEM. Using the new import function in EnFEM, users can import models built in PYWall. With the auto mesh generation function, user can run a finite element analysis with just a few mouse clicks.

ENSOFT. INC.
ENGINEERING SOFTWARE

3003 Howard Lane
Austin, Texas 78728
Tel: (512) 244-6464
www.ensoftinc.com

PYWall and EnFEM Bundle

Build Model Once in PYWall and run analyses in both PYWall and EnFEM.

PYWall Features

- *p-y* curves for weak rock, soft clay, stiff clay with and without free water, sand, silt (c-phi soil), and strong rock (Vuggy Limestone).

- Automatically generate active earth pressures with triangular distributions based on the traditional Rankine theory or trapezoidal distribution for anchored walls. When selected, users may also specify a constant load factor to increase or decrease the magnitude of earth pressures generated by the program.

- Additional surcharge loads may be specified in the back side of the wall. Four types of surcharge loads can be specified: area load, point load, line load and/or strip load.

- Struts or braces may be specified at any height(s) of the wall. The stiffness of these elements can be modeled as linear elastic springs or fully nonlinear springs.

- View combined output of lateral movements, shear and bending moment along the height of the wall.

- Struts or braces may be specified at any height(s) of the wall. The stiffness of these elements can be modeled as linear elastic springs or fully nonlinear springs.

- Struts or braces may be specified at any height(s) of the wall. The stiffness of these elements can be modeled as linear elastic springs or fully nonlinear springs.

- Quick and combined observation of results of wall deflections and bending moments in different construction stages.

EnFEM Features

- **Integrated with PYWall, EnSlope, and UTexas4**. Using the import function in EnFEM, users can import models built in PYWall, EnSlope, or UTexas4. With the auto mesh generation function, user can run an finite element analyses with just a few mouse clicks.

- CAD-like interface for geometry creation and/or modification, assignment of analysis parameters, and post-processing.

- Abundant library with the following available material models: linear elastic, Tresca, Mises, Mohr-Coulomb, Druker-Prager, Duncan-Chang hyperbolic, and Modified Cam-Clay.

- Multi-stage analysis for simulating sequentially applied loads, as well as geostatic (initial) soil stresses, and excavations.

- Soil-structure interaction with computational contact analysis, capable of simulating material separations and sliding.

- Powerful mesh generator to generate first or second-order, quadrilateral or triangular finite element meshes, in either structured, unstructured, or combined meshes.

- Nonlinear direct solver based on multithreading and parallel processing optimizations.

- Completed examples files and accompanying instructional manual (Example Manual) to help users quickly learn the program, through common geotechnical and structural engineering problems.

CURRENT PRICES*

PYWall v2025 (Single-User License)	**$950.**^{oo}
EnFEM v2025 (Single-User License)	**$2000.**^{oo}
EnFEM Yearly maintenance fee (optional, after first year)	$200.^{oo}
PYWall Yearly maintenance fee (optional, after first year)	$140.^{oo}